

FISCAL YEAR 2019

STATE CLEAN DIESEL GRANT PROGRAM

WORK PLAN AND BUDGET NARRATIVE TEMPLATE

INSTRUCTIONS: States and territories applying for FY 2019 DERA State Clean Diesel Grant Program funding must use this template to prepare their Work Plan and Budget Narrative.

Please refer to the FY 2019 STATE CLEAN DIESEL PROGRAM INFORMATION GUIDE for full Program details, eligibility criteria and funding restrictions, and application instructions.

SUMMARY PAGE

Project Title: Florida Diesel Emissions Mitigation Program for Federal Fiscal Year (FY) 2019

Project Manager and Contact Information

[Redacted Project Manager and Contact Information]

Project Budget Overview:

	FY 2019
EPA Base Allocation	\$342,934
State or Territory Voluntary Matching Funds (if applicable)	\$342,934
EPA Match Incentive (Bonus) (if applicable)	\$171,467
Mandatory Cost-Share	\$ As required by category
TOTAL Project Cost	\$857,335
Other Leveraged Funds	Unknown

Project Period

October 1, 2017 – September 30, 2021 (This continuation covers 10/1/2019 to 9/3/2021).)

Summary Statement

As stated in the DERA application materials from FY 2018, the Florida Department of Environmental Protection (Department) intends to use available FY 2018 grant funding and is applying for FY 2019 grant funding in conjunction with funds made available to the State of Florida from the Volkswagen Environmental Mitigation Trust (Trust). The Department intends to use funds from the Trust for the state's voluntary match. Florida became a beneficiary of the

Trust on January 30, 2018, following a longer-than-expected legal process to establish the Trust. This has delayed implementation of Florida's FY 2018 DERA projects.

In the current DERA project cycle, the Department has identified and encumbered two projects to be completed before June 30, 2019. The first is for the replacement of three marine diesel engines on a vessel in Port Tampa, for a \$141,000 cost share from DERA base funding. The second project is for the replacement of three port drayage trucks at Port Miami for a \$155,663.64 cost share from DERA base funding. This is a total of \$296,663.64 of the \$301,991 from the DERA FY 2017 base funding.

This application will combine the FY 2018 allowable project cost funding of \$705,050 with the FY 2019 allowable project cost funding of \$857,335 to fund eligible projects with state-match funding from the Trust. The Department was successful in securing nonrecurring budget authority from the Florida Legislature to draw down DERA funding for FY 2018 and FY 2019 projects. This budget authority will become available on July 1, 2019. The Department will seek additional budget authority for future DERA projects in the next annual Florida Legislative Session in 2020.

At present, the project types to be funded during the FY 2018 and FY 2019 budget cycles will focus on ports, primarily through marine engines, and other nonroad or rail options located within the freight intermodal sector.

The Department maintains a website that provides the public with information on DERA programs and details past DERA-related projects in the state: <https://floridadep.gov/air/air-director/content/diesel-emissions-reduction-act-dera-florida>

SCOPE OF WORK

STATE/TERRITORY GOALS AND PRIORITIES:

All of Florida is in attainment for the following criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone, particulate matter (both PM₁₀ and PM_{2.5}), and lead (Pb). The majority of Florida is in attainment for sulfur dioxide (SO₂), with the exception of two small geographic areas centered around certain large stationary sources in Hillsborough and Polk counties. These SO₂ impacted areas are mainly due to the influence of large stationary emission sources.

Although most air pollutants in Florida occur in concentrations well below the National Ambient Air Quality Standards (NAAQS), some can occur locally in concentrations that potentially affect the health of Florida's citizens. The pollutants of greatest concern are ground-level ozone and particulate matter, together with the precursors that form them (i.e., NO_x, SO₂, and volatile organic compounds [VOCs]). The use of legacy diesel-powered vehicles is a significant contributor to the total emissions that lead to ground-level ozone formation and increased particulate matter concentrations. Local impacts from diesel exhaust includes a range of hazardous air pollutants, which are an additional health concern.

According to the 2014 National Emission Inventory (NEI), Florida's total emissions of NO_x from all sources, both stationary and mobile, was 582,390 tons.¹ The majority of these NO_x emissions came from mobile sources. These sources emitted 416,565 tons in 2014, approximately 71% of the total statewide NO_x emissions. In Florida, approximately 33% of all NO_x emissions (194,638 tons) are from diesel-powered mobile sources. Figure 1 shows the sources of NO_x emissions in Florida. Figure 2 shows the distribution of total NO_x emissions by county.

Figure 1. Percentage Distribution by Sector for All NO_x Emissions in Florida (2014)

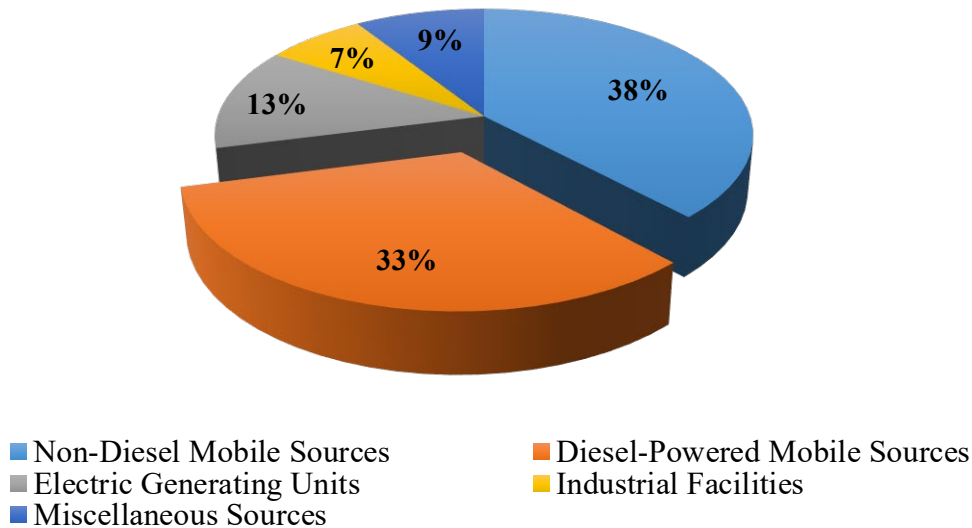
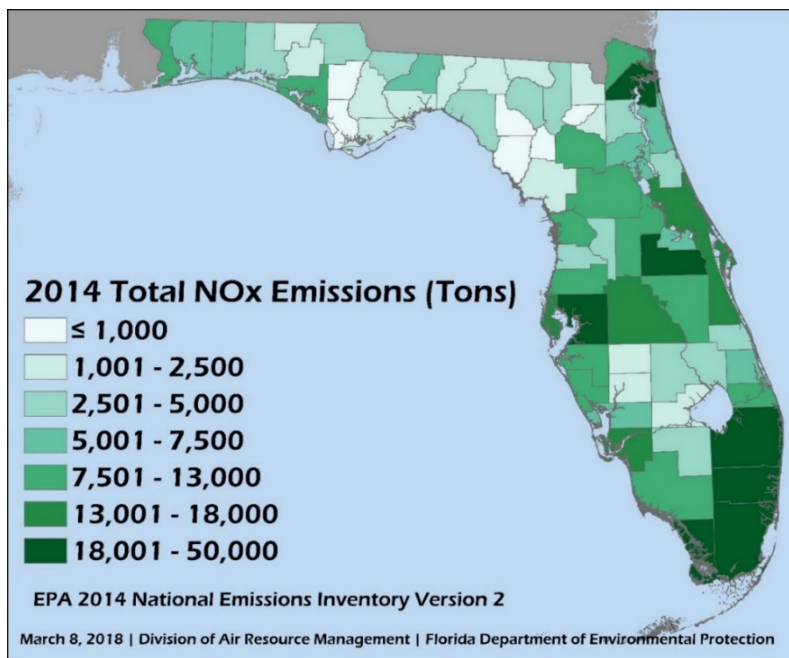


Figure 2. Distribution by County for All NO_x Emissions in Florida (2014)



¹ EPA's 2014 NEI Data: <https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data>

Figure 3 shows the main categories of NO_x emissions from diesel-powered mobile sources. Figure 4 shows mobile sources of NO_x distributed by county. Of the 194,638 tons of NO_x emitted from diesel-powered mobile sources, the sources break down into the following specific subcategories:

- 100,709 tons from on-road diesel heavy-duty vehicles (i.e., tractor trailers);
- 63,675 tons from non-road diesel equipment (e.g., heavy forklifts);
- 16,786 tons from commercial marine vessels (e.g., cruise and container ships);
- 7,448 tons from on-road diesel light-duty vehicles (i.e., personal vehicles); and
- 6,020 tons from diesel-powered locomotives (i.e., switcher locomotives).

Figure 3. Percent Distribution of Diesel-Powered Mobile Source NO_x Emissions (2014)

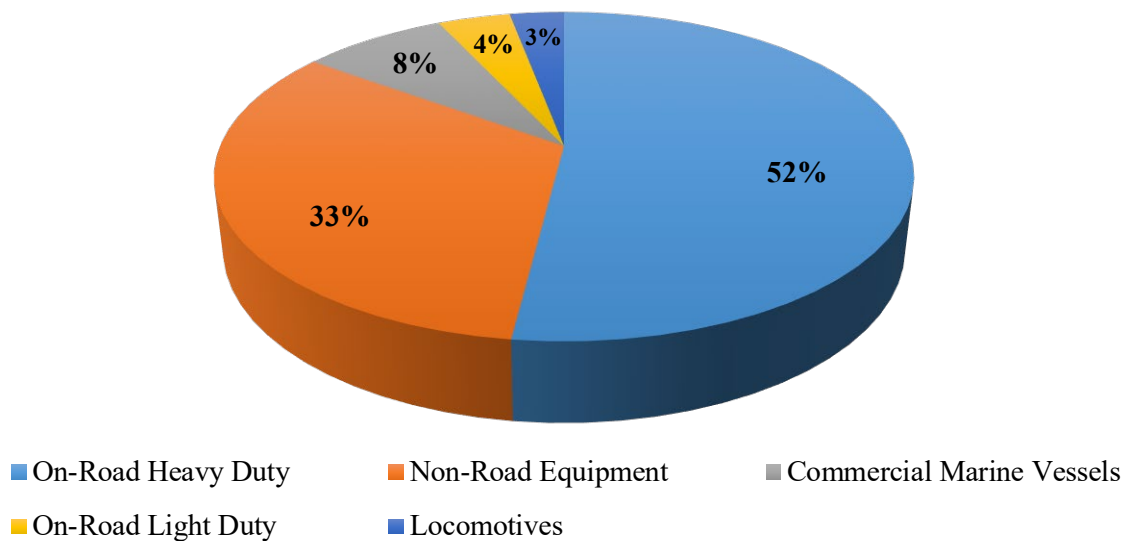
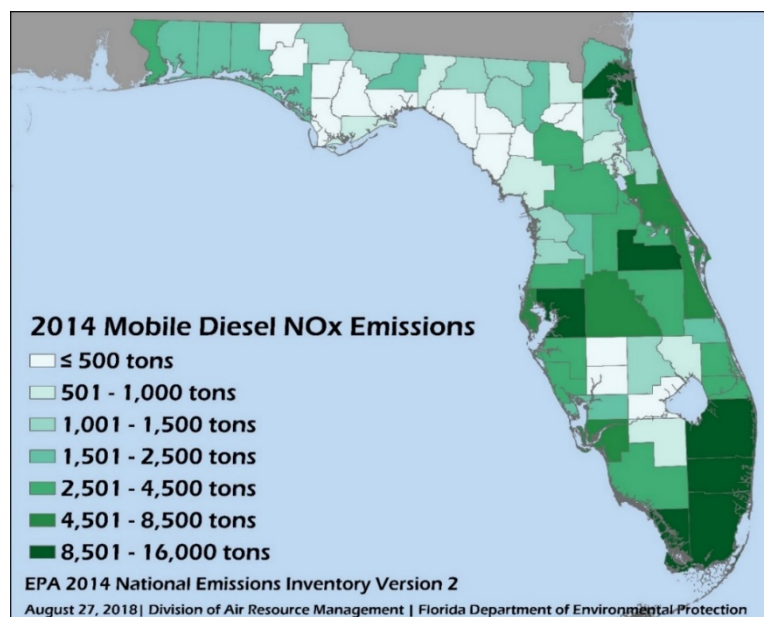


Figure 4. Distribution by County for Mobile Source NO_x Emissions in Florida (2014)



The 2014 NEI indicates that Florida's total emissions of fine particulate matter (PM_{2.5}) from mobile sources is 19,810 tons. Approximately 63 percent of this total is from diesel-powered mobile sources including:

- 5,682 tons from on-road diesel heavy duty vehicles;
- 4,840 tons from non-road diesel equipment;
- 1,389 tons from commercial marine vessels;
- 273 tons from diesel-powered locomotives; and
- 305 tons from on-road diesel light duty vehicles.

Florida's ambient monitoring network for PM_{2.5} shows that there are no areas of the state exceeding either the annual or 24-hour PM_{2.5} NAAQS.

The 2014 NEI indicates that Florida's total emissions of coarse particulate matter (PM₁₀) from mobile sources is 33,659 tons. Approximately 47 percent of this total is from diesel-powered mobile sources including:

- 8,564 tons from on-road diesel heavy duty vehicles;
- 4,990 tons from non-road diesel equipment;
- 1,476 tons from commercial marine vessels;
- 295 tons from diesel-powered locomotives; and
- 497 tons from on-road diesel light duty vehicles.

Florida's ambient monitoring network for PM₁₀ shows that there are no areas of the state exceeding the 24-hour PM₁₀ NAAQS.

Overall trends in the state's air quality are good. There does, however, remain work to address local impacts of emissions from older diesel engines, which are projected to remain a component of commercial and government operated vehicle fleets for many years. Encouraging voluntary measures with the aid of grant funding to address related air quality impacts is important to Florida's broader goal of improving air quality for the state's citizens and visitors.

Additionally, prioritizations for project-specific funding through the DERA program will be, to the greatest extent possible, based on project types not prioritized in the Department's Mitigation Plan through the Volkswagen Settlement. Therefore, this next round of DERA funding will focus on port projects.

VEHICLES AND TECHNOLOGIES:

As of the date of this submittal, the Department has identified port projects for this round of DERA funding. Through stakeholder engagement and recent success in funding a marine engine replacement project and port drayage trucks, the Department has identified the following port projects for consideration:

- Marine engines, including ferries and tugs
- Nonroad cargo handling equipment
- Switcher locomotives
- Port drayage trucks

The Department selected port projects based on the Mitigation Plan focusing on other project types, as well as the recent success funding marine engine and port drayage truck replacement projects.

ROLES AND RESPONSIBILITIES:

The Department will work with entities identified during a Notice of Funding Availability to take place in July 2019. The Department may elect to use Trust Funds to leverage resources beyond the stated voluntary match. As the lead agency designated by the Florida Governor under the Trust, the Department will be responsible for providing the incentive match from the Trust. All cost sharing requirements with project partners will be evaluated to meet minimum DERA guidelines but may be increased depending on the extent of interest from project partners. The Department's DERA Program will consider asking project partners to increase their cost share amount which will allow for the possibility of more DERA project partners and ultimately more units being retrofitted, repowered, or replaced. The Department's Division of Air Resource Management will be responsible for managing the state's DERA program including contract management and purchasing. The Department's Bureau of Finance and Accounting within the Division of Administrative Services will submit to EPA grant drawdown requests after projects are completed.

TIMELINE AND MILESTONES:

The Department intends to identify a list of partners for the FY 2019 DERA program in July 2019. The Department will then develop grant agreements with the selected project partner or partners in August 2019. The Department expects this round of funding to follow this general timeline:

First Round of Port Project Phase Florida's FY 2019-20

- August 2019 – Department develops grant agreements with the final project partner or partners for the FY 2018 and FY 2019 DERA grant pursuant to Florida's FY 2019-20 budget authority.
- November 2019 – Deadline for project partners to select vendors for the project.
- May 2020 – Department conducts program evaluation to ensure progress on selected project or projects.
- June 2020 – Project partner or partners complete all work under the grant agreement and provide all required documentation to the Department thereby becoming eligible for reimbursement. Department reimburses project partners for completed work pursuant to

the grant agreement or agreements. Once reimbursements have been paid to the project partners, the Department will prepare and submit a reimbursement package to EPA.

Second Round of Port Project Phase Florida's FY 2019-20

- If the first round of projects does not fully exhaust the total funding for FY 2018 and FY 2019, the Department will identify a second round of funding and work to complete projects by the end of June 2020.

DERA PROGRAMMATIC PRIORITIES:

Projects funded under the DERA grants will align with EPA's programmatic priorities of achieving significant reductions in diesel emissions exposure from engines operating in areas with greater local air quality concerns relating to diesel vehicle emissions. These areas include places where Port projects are found (i.e., dense urban settings on coastal waterways at which numerous Port commerce units operate). As of the date of this submittal, the Department is evaluating Port projects with potential to address emissions taking place on land and units in the water. These emissions reductions will benefit port workers, and, at some ports, also benefit passengers of vessels which are based in the port. Additionally, most of Florida's ports are located in areas closer to the NAAQS for ozone.

EPA'S STRATEGIC PLAN LINKAGE AND ANTICIPATED OUTCOMES/OUTPUTS:

Florida's 2019 DERA grant program will fund mitigation projects consistent with EPA's Strategic Plan for DERA programs to reduce local and regional air pollution from criteria pollutants and air toxics. The Department will utilize EPA's Diesel Emissions Quantifier (DEQ – available at www.epa.gov/cleandiesel/diesel-emissions-quantifier-deq), among other tools, to quantify the emission reductions for each project. The Department will also utilize DEQ-modeled outputs, including the number of engines replaced, and document related outreach and communication efforts to link activities under Florida's 2019 DERA grant program to EPA's Strategic Plan. The two examples of potential projects below show the relative NO_x and PM reductions for switcher locomotives and tugs when repowered with engines that meet new standards.

Switcher Locomotive (1,000 HP Tier 0 engine with 3,000 hours of annual operation)

- Eligible Unit: 6,894 lbs/year of NO_x and 236 lbs/year of PM
- New Unit: 546 lbs/year of NO_x and 6 lbs/year of PM
- Percent Reduced: 94% in NO_x and 97% in PM

Tug Boat (Two 1,000 HP uncontrolled engines with 1,000 hours of annual operation)

- Eligible Unit: 28,702 lbs/year of NO_x and 3,798 lbs/year of PM
- New Unit: 796 lbs/year of NO_x and 76 lbs/year of PM
- Percent Reduced: 97% in NO_x and 98% in PM

SUSTAINABILITY OF THE PROGRAM:

The Department maintains a website that contains records related to past DERA-related projects: <https://floridadep.gov/air/air-director/content/diesel-emissions-reduction-act-dera-florida>. The Department also published a website relating to the Trust: <https://floridadep.gov/volkswagen>

Throughout the administration of Florida's 2019 DERA State Grant program, the Department will maintain a publicly accessible website and repository of data and information obtained through various outreach and procurement related activities. The Department anticipates utilizing the DERA Option under the Volkswagen Partial Consent Decree over the duration of programmatic activities related to implementation of the Volkswagen Environmental Mitigation Trust. The Department expects that DERA-related projects may occur over multiple years, and the benefits of such projects will be compounded by association with larger-scale diesel emission reduction and NO_x mitigation activities under the Volkswagen Environmental Mitigation Trust. The Department is committed to identifying, developing, and administering projects that maximize the environmental benefits that accrue through targeted diesel emission reduction efforts, consistent with the requirements of the Volkswagen Partial Consent Decree and DERA program. All projects funded through these programs will be documented and archived on a publicly available website, and they may be featured in targeted public communication efforts through web-based and conventional media outlets at both a local and state level.

BUDGET NARRATIVE

Budget Category	FY 2018			FY 2019			Total
	EPA Allocation	Voluntary Match (if applicable)	Mandatory Cost-Share (if applicable)	EPA Allocation	Voluntary Match	Mandatory Cost-Share	
Personnel	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fringe Benefits	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Supplies	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contractual	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Program Income	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$423,030	\$282,020	TBD	\$514,401	\$342,934	TBD	At Least \$1,562,385
Total Direct Charges	\$423,030	\$282,020	TBD	\$514,401	\$342,934	TBD	At Least \$1,562,385
Indirect Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$423,030	\$282,020	TBD	\$514,401	\$342,934	TBD	At Least \$1,562,385

Explanation of Budget Framework

- ***Personnel***

The Department does not intend to spend any DERA funds to support personnel expenses incurred during the administration of Florida's 2017 and 2018 DERA State Grant program. Work associated with the DERA program will be assumed by current Department staff.

- ***Fringe Benefits***

The Department does not intend to spend any DERA funds to cover fringe benefit costs incurred during the administration of Florida's 2017 and 2018 DERA State Grant program.

- ***Travel***

The Department does not intend to spend any DERA funds on travel costs incurred during the administration of Florida's 2017 and 2018 DERA State Grant program. Travel and other costs associated with the Department's attendance at the Southeast Diesel Collaborative have been budgeted within Department's existing budget and will not be funded by the DERA program.

- ***Equipment***

The Department does not intend to spend any DERA funds on equipment during the administration of Florida's 2017 and 2018 DERA State Grant program.

- ***Supplies***

The Department does not intend to spend any DERA funds on supply costs incurred during the administration of Florida's 2017 and 2018 DERA State Grant program.

- ***Contractual***

The Department does not intend to spend any DERA funds on contractual costs incurred during the administration of Florida's 2017 and 2018 DERA State Grant program.

- ***Other***

The Department intends to provide DERA funds (and associated Volkswagen Environmental Mitigation Trust Funds) through grant agreement relationships with program partners that have eligible projects under the DERA program. Because Florida has not yet identified specified partners or projects, the Department will amend Florida's DERA Workplan when such information becomes available. Once partners and projects have been identified, the state will comply with the state's procurement guidelines, which require competitive procurement.

- ***Indirect Charges***

The Department does not intend to spend any DERA funds on indirect charges incurred during the administration of Florida's 2017 DERA State Grant program.

Administrative Costs Expense Cap

The Department does not intend to spend any DERA funding on administrative costs.

Matching Funds and Cost-Share Funds

Florida plans to utilize matching funds and potentially overmatching funds from the Volkswagen Mitigation Trust for Florida's state match. In addition, the Department will require that all project partners meet the minimum DERA cost share requirements. As stated above, the Department may increase the level of cost share required by project partners. The Department will require that project partners meet all applicable cost-share requirements as specified in the State Clean Diesel Grant Program Information Guide.

Funding Partnerships

The Department does not anticipate activities that qualify under this heading.

Other Leveraged Funds

The Department does not anticipate activities that qualify under this heading.